

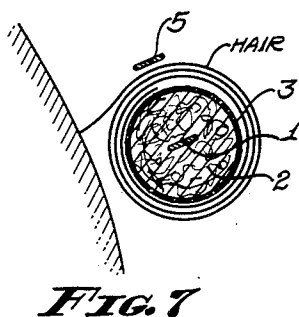
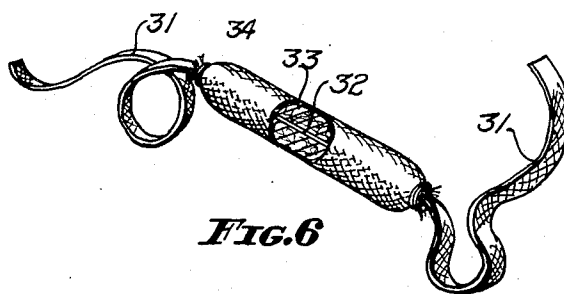
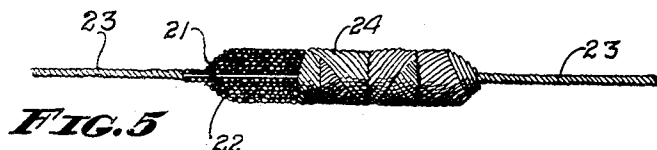
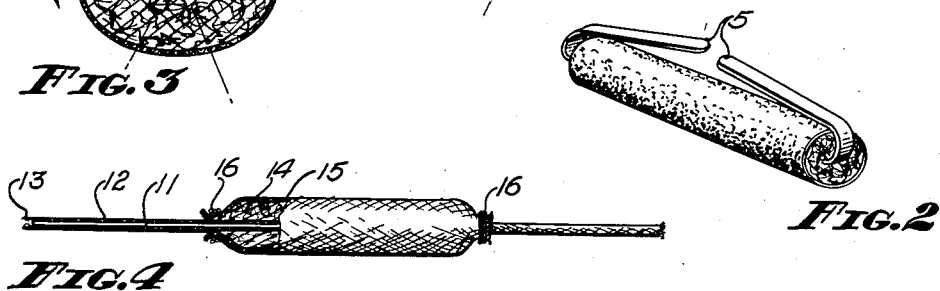
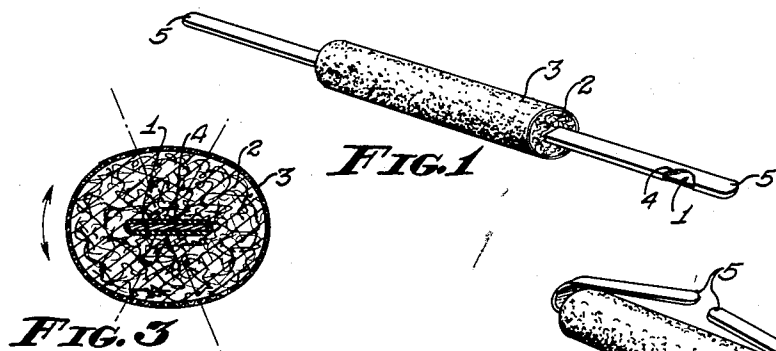
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HAIR CURLER AND METHOD OF TREATING HAIR

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HAIR CURLER AND METHOD OF TREATING HAIR

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3 Claims. (Cl. 132—43)

My invention relates to hair curlers and to a method of treating hair, and among the objects of my invention are:

First, to provide a hair curler which is particularly adapted for use to effect a hair condition treatment following a permanent wave by replenishing the oil or lubricant removed in the process of permanent waving, and to compensate for the impaired ability of the hair after being permanent waved to conduct the natural hair oils from the roots to the tips of the hair.

Second, to provide a hair curler and method which tend to apply the hair treatment fluid in proportion to the needs of the hair; that is, the tips of the hair receive the greater application whereas the root ends receive a minimum amount.

Third, to provide a hair curler which, by reason of its oil or lubricant supplying property greatly reduces the tendency of the hair to split at the ends subsequent to a permanent wave and in general tends to improve and render more natural the effect of the permanent wave.

Fourth, to provide a hair curler which has a relatively soft body about which the hair is wound and readily folded end portions so that the curler offers minimum discomfort when worn during sleep.

Fifth, to provide a hair curler having an oil or lubricant impregnated body and relatively lubricant free retaining tabs so that when the curler is wrapped with hair the lubricating body is virtually entirely covered and little if any of the lubricant escapes on the pillow if worn when one is sleeping.

Sixth, to provide a hair curler which is particularly economical of manufacture so that it may be used once or only a few times and then discarded.

With the above and other objects in view, reference is directed to the accompanying drawings, in which:

Figure 1 is a perspective view of one form of my curler before use.

Figure 2 is another perspective view thereof showing the manner in which the ends are folded when in use.

Figure 3 is an enlarged sectional view thereof taken through 3—3 of Figure 1.

Figure 4 is a partial sectional, partial elevational view of a modified form of my hair curler.

Figure 5 is likewise a partial sectional, partial elevational view of another form of my hair curler.

Figure 6 is a perspective of a further modified form of my curler wherein ribbon elements are provided to tie the curler in place.

Figure 7 is a diagrammatical transverse sectional view of my hair curler showing the manner in which hair is wound thereon to cause greater lubrication of the tip ends than the root ends.

My hair curler as shown in Figures 1, 2, and 3 comprises a core 1 preferably in the form of a flat strip of metal such as soft iron or copper or an alloy. The central portion of the core is covered by a cylindrical pad 2. The pad is relatively soft and may be formed of cotton or paper or other soft, absorbent, compressible material. The pad may be covered by a woven serving 3 or may be formed of a fitted or gauzelike porous material such as are used to encase absorbent medical pads.

The pad is at least semi-saturated with a hair treating liquid, preferably an oil which supplements the natural hair oil, although so-called brilliantine may be used. Experimentation and trial have shown that only partial saturation is required in order to provide a satis-

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factory degree of oil transfer from the padding to the hair; furthermore the curler may be used several times before the quantity of oil is reduced to the point that the curler becomes ineffective.

The core 1 is provided with a coating 4 which may cover the entire length or only the protruding or tab portions 5. The coating is preferably a semi-soft plastic capable of bending with the core 1.

As shown in Figures 2 and 7 the curler is placed at the extremity of a lock of hair and the hair wound upon the padding, from the tips toward the roots, the successive convolutions of hair being superposed one upon the other. Tension is preferably applied to the hair as it is wrapped about the curler to stretch the hair and improve the tendency of the curler to produce or train a curl in the hair; furthermore the compression of the hair wrapped about the padding causes the oil to exude. It will be observed, particularly from Figure 6 that the tip ends of the hair adjacent the padding tend to receive more oil than the root end which is spaced therefrom by intervening hair. This is just as desired, for one after effect of a permanent wave is to impair the ability of the hair to conduct oil from the scalp to the hair tips, and the permanent wave treatment itself removes or extracts a portion of the natural oil and to a greater extent at the tips than at the roots. Often the ends of the hair split following a permanent wave giving a fuzzy appearance, this condition is minimized by the oil applied and retained for a period of time in contact with the hair by reason of my curler.

After winding the hair into a roll, the tab ends 5 are folded over as shown in Figures 2 and 7 holding the curler and hair in place. It will be observed that virtually all of the padding 2 may be covered by the hair so that the hair when done up on my curlers is not particularly oily and one may sleep with the curlers in place without appreciable oozing of excess oil onto the pillow. Such use of my curlers at night is also enhanced by the fact that the relatively small wire core is completely covered and the curler as a whole is soft so that it offers a minimum of discomfort.

Reference is now directed to Figure 4. The curler here illustrated functions identically to the first described curler but is manufactured in a different manner. This curler includes a core 11 of copper or soft iron wire over which is woven a single or multiple serving 12. To this extent the core may be substantially identical to "slip back" wire such as used in electrical wiring particularly radio circuits. The serving on such wire is impregnated with a paraffin or similar material and the core as I employ it may be similarly treated. Alternatively or in addition to the woven serving 12, the wire may have a plastic or oil resistant synthetic rubber serving. If a "slip back" type of wire is used the serving may be slipped from the end of the wire before cutting the wire, then pulled over the end to form a protective end covering 13.

The core here described may be padded in the manner of the first described curler; however, in this case it is shown as wrapped several convolutions with a web or square piece of absorbent material 14 over which is wrapped a clothlike webbing 15. The extremities of the padding and webbing may be secured, "tamale" wise, by tied or stapled bands 16. As in the first instance, the padding 14 is semi-saturated or impregnated with an oil or hair lubricant.

Reference is now directed to the curler shown in Figure 5. This curler includes a core 21 of copper or soft steel around which is helically wrapped a stringlike member 22. Only a single or minimum number of wrappings are applied around the extremities 23 of the wire core, whereas the central portion 24 is built up of a series of helical layers. Ordinary cotton string is satisfactory; also ordinary brown package twine having hemplike characteristics has been found satisfactory, particularly in that a gripping action is accomplished which aids in winding the hair under tension about the curler. This gripping action is further enhanced by the helical manner in which the wrapping is applied as the strands of hair wedge between the convolutions.

The extremities 23 of the curler are preferably im-

pregnated or coated with an oil resistant substance, having adhesive qualities so that the wrapping will not unwind. The central enlarged portion 24 is semi-saturated with a hair lubricant.

The tendency for the absorbent body or pad to grip the hair so that tension may be applied is not confined to the form shown in Figure 5. If open mesh sewing is employed or if the felt or gauze-like covering such as employed in surgical pads is used a gripping action is attained. As indicated previously it is highly desirable to obtain a light hold on the ends of the hair when wrapping so that the tension needed to effect a good "curl" may be obtained.

Reference is now directed to Figure 6. Here the curler may take any of the forms previously described within the region of the padding but the extended end portions are omitted and instead ribbons 31 are provided, the ends of which may be tied together in a bow.

A core 32 of soft steel or copper is preferred within the padding. However, inasmuch as the purpose in this case is merely to stiffen the curler, other semi-stiff material such as tightly twisted paper stock or a length of plastic, or plastic impregnated material may be used. The ribbon preferably extends through the curler and continues beyond the ends. Wrapped about the core is padding material 33 and this is covered with a mesh 34. Or as indicated above, the padding with or without a separate covering may take any of the previously described forms.

It should be observed, particularly in regard to the construction shown in Figures 1, 2, and 3 that the padding, especially if it comprises cotton batting or similar material permits torsional displacement of the surface with respect to the core 1 as the hair is drawn tight. By reason of this fact, and the provision of a flat core which may be easily grasped to transmit a torsional force, not only may the curler be given that extra twist which causes the hair to draw tight, but also the core may be turned after the hair resists further turning of the surface of the curler until tab ends 5 are in proper position to be folded.

It will be observed that, in all forms, the curler is in the nature of a soft, compressible, substantially cylindrical cartridge, around which the hair is wound, as explained.

While I have described the invention as designed especially for applying oil or brilliantine to the hair, it is obvious that the basic principles thereof can equally well be employed for applying any desired hair treating liquid.

The present application is a continuation of my prior co-pending application S. N. 681,881, filed July 8, 1946, and now abandoned.

Having thus described certain embodiments of my invention, I do not desire to be limited thereto but intend to protect all novelty inherent in the appended claims.

I claim:

1. A hair curler comprising: a central bendable reinforcing core; relatively non-absorbent yieldable coverings for the extremities of said core; an enlarged absorbent body covering the central portion of said core; and a hair lubricant impregnating said body.

2. As an article of manufacture, a hair curler comprising: a body of absorbent material impregnated with a hair lubricant whereby when wrapped with a lock of hair the constricting force of the hair causes the lubricant to exude principally into the initial convolutions of hair, the outer convolutions of hair tending to form a protective covering to minimize transfer of the lubricant to the scalp and extraneous objects; and a flat metallic strip threaded through said body and forming projecting tabs adapted to be folded over the hair to clamp the hair wrapped on said body.

3. As an article of manufacture, a hair curler comprising an elongated body of soft, compressible, absorbent material, and a semi-rigid bendable core extending there-through and projecting from the ends thereof, said body of absorbent material being impregnated with a hair treating liquid and having a surface tending to frictionally grip the hair, whereby, when the tip of a lock of hair is applied to said body it tends to cling thereto, thus facilitating winding, and as the lock of hair is wound thereon from the tip toward the roots, the compression exerted by the hair causes the liquid to exude from said body and permeate the roll of hair, from the inside, outwardly, and the projecting ends of said bendable core being adapted to be bent over on the roll of hair, thus securing it in wound position.

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